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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/534,824	03/23/2000	Christopher J. Edge	10128US01	9982

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EXAMINER
SMITH, PETER J

ART UNIT	PAPER NUMBER
2176	8

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

Office Action Summary	Application No. 09/534,824	Applicant(s) EDGE ET AL.
	Examiner Peter J Smith	Art Unit 2176

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _23 March 2000_ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-46_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-46_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _23 March 2000_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _4,5_ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other:

DETAILED ACTION

1. This action is responsive to communications: application filed on 03/23/2000, IDS filed on 10/20/2000 and 12/26/2000.

2. Claims 1-46 are pending in the case. Claims 1, 10, 18, 26, 32, 38, 44, 45, and 46 are independent claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1, 5, 9, 10, 14, 18, 22, 26, 29-30, 32, 35-36, 38, and 41-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Bengtson, US 5,659,638 published 08/19/1997.**

Regarding independent claims 1, 10, and 18, Bengtson discloses identifying implicit color commands within a page description file and converting the implicit color commands within the page description file to explicit color commands in col. 1 lines 40-54. The bitmaps explicitly and independently define the color for each pixel.

Regarding dependent claims 5, 14, and 22, Bengtson does discloses converting substantially all of the implicit color commands within the page description file to explicit color commands in col. 1 lines 40-54. The bitmap is a complete conversion of the page description file to explicitly defined pixels.

Regarding dependent claim 9, Bengtson discloses explicit color commands, which upon raster image processing, define visual output that is analogous to visual output defined by the corresponding implicit color commands in col. 1 lines 40-54. Bengtson shows that a page description file can be converted to a bitmap to output to a printer. The purpose of page descriptions files was to produce what-you-see-is-what-you-get (WYSIWYG) output and thus the output would be inherently analogous.

Regarding independent claims 26, 32, and 38, Bengtson discloses identifying implicit color commands within the page description file to a plurality of implicit color sub-commands, converting each of the implicit color commands within the page description file to a plurality of implicit color sub-commands, and wherein each of the implicit color commands pertains to a spatial area, and each of the implicit color sub-commands pertains to a sub-section within the spatial area in col. 1 lines 40-54. Bengtson lists various implicit commands which pertain to sub-sections of the spatial areas such as images, line art, and characters.

Regarding dependent claims 29, 35, and 41, Bengtson discloses converting substantially all of the implicit color commands within the page description file to implicit color sub-commands in col. 1 lines 40-54. The bitmap is a complete conversion of the page description file to explicitly defined pixels.

Regarding dependent claims 30, 36, and 42, Bengtson discloses converting some of the implicit color commands within the page description file to implicit color sub-commands, and converting others of the implicit color commands to explicit color commands in col. 1 lines 45-48. The images contained in the page description file can contain bitmapped elements, which would provide for a mix of both implicit and explicit color commands.

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

6.   **Claims 3-4, 6-8, 12-13, 15-17, 20-21, 23-25, 28, 31, 34, 37, 40, and 43 are rejected**

under 35 U.S.C. 103(a) as being unpatentable over Bengtson, US 5,659,638 published

08/19/1997.

Regarding dependent claims 3, 12, and 20, Bengtson teaches explicit color commands

in the form of bitmaps in col. 1 lines 40-54. What Bengtson does not teach is modifying the

color values of the explicit color commands. One of ordinary skill in the art at the time of the

invention would have known how to modify explicit color values. They are defined by numbers

and associated with particular points. It would have been obvious to one of ordinary skill in the

art at the time the invention was made to combine their knowledge with Bengtson to create the

claimed invention. It would have been obvious and desirable to allow the user control over the

explicit color commands so that they could modify the output to their liking.

Regarding dependent claims 4, 13, and 21, Bengtson teaches implicit commands and

the conversion of implicit color commands to explicit color commands in col. 1 lines 40-54.

What Bengtson does not explicitly teach is an implicit color command which defines

reproduction of a graphic image object over a color range. One of ordinary skill in the art at the

time of the invention would have known about an implicit color command which defines

reproduction of a graphic image object over a color range. It would have been obvious to one of

ordinary skill in the art at the time the invention was made to have combined their knowledge

with Bengtson to create the invention as claimed. It would have been obvious and desirable to

have converted a color gradient to explicit commands so that the user would have had more

control over the color.

Regarding dependent claims 6, 15, and 23, Bengtson teaches implicit commands and

the conversion of implicit color commands to explicit color commands in col. 1 lines 40-54.

What Bengtson does not explicitly teach is a shading command that defines a graphic image

object characterized by a starting color value, an ending color value, and a shading function over

a range of color values between the starting color value and the ending color value. One of

ordinary skill in the art at the time of the invention would have known about shading commands,

how to use them, and how to convert them. It would have been obvious to one of ordinary skill

in the art at the time the invention was made to combine their knowledge with Bengtson to create

the claimed invention. It would have been obvious and desirable to convert shading functions

because they are common implicit command functions and so that the user would have had more

control over the color.

Regarding dependent claims 7, 16, and 24, Bengtson teaches sub-objects in the form of

bitmapped pixels in col. 1 lines 40-54 which can break down and represent any implicit color

command. What Bengtson does not explicitly teach is a shading command that defines a graphic

image object as a plurality of sub-objects. One of ordinary skill in the art at the time of the

invention would have known about shading commands, how to use them, and how to convert

them. It would have been obvious to one of ordinary skill in the art at the time the invention was

made to combine their knowledge with Bengtson to create the claimed invention. It would have been obvious and desirable to convert shading functions because they are common implicit command functions and so that the user would have had more control over the color.

Regarding dependent claims 8, 17, and 25, Bengtson does not explicitly teach the color values of cyan, magenta, yellow, and black. The color values of cyan, magenta, yellow, and black were very well known in the art because they are primary colors for generating output. The use of these colors in Bengtson is inherent because those colors would have been used for generating the output.

Regarding dependent claims 28, 33, and 40, Bengtson teaches sub-objects in the form of bitmapped pixels in col. 1 lines 40-54 which can break down and represent any implicit color command. What Bengtson does not teach is modifying the color values of the implicit color sub-commands. One of ordinary skill in the art at the time of the invention would have known how to modify implicit color sub-commands. They are defined by numbers and associated with particular points. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine their knowledge with Bengtson to create the claimed invention. It would have been obvious and desirable to allow the user control over the implicit color sub-commands so that they could modify the output to their liking.

Regarding dependent claims 31, 37, and 43, Bengtson does not explicitly teach the color values of cyan, magenta, yellow, and black. The color values of cyan, magenta, yellow, and black were very well known in the art because they are primary colors for generating output. The use of these colors in Bengtson is inherent because those colors would have been used for generating the output.

7.   **Claims 2, 11, 19, 27, 33, 39, and 44-46 are rejected under 35 U.S.C. 103(a) as being**

unpatentable over Bengtson, US 5,659,638 published 08/19/1997 in view of Bando, US

6,449,053 B2 priority filed 07/23/1996.

Regarding dependent claims 2, 11, and 19, Bengtson does not teach converting implicit

color commands without raster image processing the page description file. Bando does teach

converting implicit color commands without raster image processing the page description file in

the abstract. It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine Bando into Bengtson to create the claimed invention. It would

have been obvious and desirable to convert the implicit color commands without using a raster

image processor because it would be less expensive implement as described by Bando in col. 1

lines 62-67.

Regarding dependent claims 27, 33, and 39, Bengtson does not teach converting

implicit color commands without raster image processing the page description file. Bando does

teach converting implicit color commands without raster image processing the page description

file in the abstract. It would have been obvious to one of ordinary skill in the art at the time the

invention was made to combine Bando into Bengtson to create the claimed invention. It would

have been obvious and desirable to convert the implicit color commands without using a raster

image processor because it would be less expensive implement as described by Bando in col. 1

lines 62-67.

Regarding independent claims 44, 45, and 46, Bengtson teaches accessing implicit

color commands within page description files. What Bengtson does not explicitly teach is

modifying explicit color values specified by implicit color commands or processing the page

description file without RIP-converting the page description file. One of ordinary skill in the art

at the time of the invention would have known how to modify explicit color values. They are

defined by numbers and associated with particular points. Bando teaches processing the page

description file without RIP-converting the page description file in the abstract.

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to combine their knowledge and that what was taught by Bando with Bengtson to

create the claimed invention. It would have been obvious and desirable to allow the user control

over the explicit color commands so that they could modify the output to their liking. It also

would have been obvious and desirable to convert the implicit color commands without using a

raster image processor because it would be less expensive implement as described by Bando in

col. 1 lines 62-67.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Peter J Smith whose telephone number is 703-305-5931. The

examiner can normally be reached on Mondays-Fridays 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Joseph H Feild can be reached on 703-305-9792. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-746-7239 for regular

communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-305-3900.

PJS
August 4, 2003

JOSEPH H. FEILD
PRIMARY EXAMINER